

MAK-104US

Appln. No.: 10/610,955  
Amendment dated July 19, 2010  
In Reply to Office Action of March 18, 2010

**Remarks/Arguments:**

Claims 1 and 12 have been amended. No new matter is introduced herein. Claims 1-12 are pending.

Claim 1 has been amended to recite "causing a microprocessor to perform nonlinear programming of the nonlinear objective function." In addition, claim 1 has been amended to clarify that an optimal range of appraisal values is indicated and that an appraisal of the real estate property is generated based on the optimal range of appraisal values. Claim 12 has been amended similar to claim 1. No new matter is introduced herein. Support for the amendment includes, for example, page 11, line 10-page 12, line 11 of the substitute specification (filed on October 14, 2003).

Claims 1-12 have been rejected under 35 U.S.C. § 101 as being directed to non-statutory subject. Claim 1 has been amended to recite "causing a microprocessor to perform nonlinear programming." In addition, claim 12 has been amended to clarify that the calculator is programmed to perform the recited steps. Applicant also points the Examiner's attention to the Interim Examination Instructions for Evaluating Subject Matter Eligibility Under 35 U.S.C. § 101, with respect to the eligibility of a claim tied to a particular machine. For the Examiner's convenience, a copy of the Interim Examination Instructions related to a claim tied to a particular machine is attached.

With respect to the phrase, in claim 1, of "providing further signals," Applicant refers the Examiner's attention to the Decision on Appeal dated September 18, 2009 (referred to herein as the Decision). On page 14 of the Decision, the phrase "providing signals" was interpreted as "indicating a solution to the formula" and that it broadly describes "communicating the result of" the previous step. However, Applicant's step of providing signals (step d)) (as recited in the Preliminary Amendment dated November 10, 2008) does not just "communicate a result." Instead, Applicant's step d) relates to an additional step of indicating an optimal range of appraisal values based on the optimized nonlinear objective function. Thus, in the Supplemental Preliminary Amendment dated December 31, 2009, claim 1 was amended to recite providing further signals indicative of an optimal range of appraisal values from the optimized nonlinear objective function. However, in order to expedite prosecution, claim 1 has been amended to replace "providing further signals indicative of" with "indicating." Accordingly, Applicant respectfully requests that the rejection of claims 1-12 under 35 U.S.C. § 101 be withdrawn.

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Claims 1-12 have been rejected under 35 U. S. C. § 103(a) as being unpatentable over Robbins (US 2001/0039506) in view of "Modern Real Estate Practice" by Galaty *et al.* Reconsideration is respectfully requested for the reasons set forth below.

Claim 1 includes features neither disclosed nor suggested by the cited art, namely:

... defining a nonlinear objective function that includes control variables representing the stored influence factors for all of the different types of appraisal approaches...

... causing a microprocessor to perform nonlinear programming of the nonlinear objective function to simultaneously optimize the nonlinear objective function for all of the different types of appraisal approaches by adjusting the control variables within the corresponding range of influence factor values...

... all of the different types of appraisal approaches are used together to optimize the nonlinear objective function.  
(Emphasis Added)

Claim 12 Includes a similar recitation.

Robbins teaches the determination of a real estate parcels market value through the application of the sales comparison approach to value (paragraph [0076]). In Figs. 3 and 4, Robbins teaches that a set of procedures are created to build property attribute databases and a set of procedures are created to apply the rules of appraisal to the property attribute databases in order to estimate the value of a subject property ([0105]). In Figs. 4 and 5, Robbins teaches the development of a sales condition score for individual parcels that may be used to suggest to the user a relationship between a comparable selling price and its attribute inventory (paragraphs [0133 - 0144]). Robbins also teaches that the invention assists in the reliability of the sales comparison approach by providing access to an increased number of substitute properties (paragraph [0080]).

As acknowledged by the Examiner, Robbins "does not explicitly recite using all three sales comparison approach, an income capitalization approach and a cost approach as different types of appraisal approaches," as required by claims 1 and 12. Robbins discloses, at paragraph [0080], that "an appraiser generally considers three separate approaches to value: the cost approach, the income approach, and the sales comparison approach" but that "the invention is specific to the sales comparison approach" (emphasis added).

Furthermore, Robbins does not teach: 1) defining a nonlinear objective function that includes control variables representing the stored influence factors for all of the different

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types of appraisal approaches, 2) nonlinear programming to simultaneously optimize the nonlinear objective function for all of the different types of appraisal approaches or 3) that all of the different types of appraisal approaches are used together to optimize the nonlinear objective function, as required by claims 1 and 12. Robbins is silent regarding these indicated features. In contrast to using all different types of appraisal approaches, Robbins teaches that the appraiser considers the appropriateness of the approaches to value in order to select the most appropriate approach (paragraph [0081]). Thus, Robbins does not include all of the features of claims 1 and 12.

Galaty *et al.* disclose that appraisers traditionally use the sales comparison approach, the cost approach and the income approach, where the three methods serve as checks against each other (p. 304, last paragraph). At p. 305-p. 312, Galaty *et al.* disclose linear calculations for separately appraising value by each of the three methods. At p. 312, Galaty *et al.* teach that when the three approaches are applied to the same property, three separate indications of value are produced. Reconciliation (based on the validity of each approach) is then performed to produce a single estimate of the market value. Thus, as shown in Fig. 18.1, separate calculations for each of the different appraisal value approaches are performed and reconciled (i.e., after they are separately calculated) to generate a single estimate of a market value.

Galaty *et al.*, however, do not disclose or suggest: 1) defining a nonlinear objective function that includes control variables representing the stored influence factors for all of the different types of appraisal approaches, 2) nonlinear programming to simultaneously optimize the nonlinear objective function for all of the different types of appraisal approaches or 3) that all of the different types of appraisal approaches are used together to optimize the nonlinear objective function, as required by claims 1 and 12. Galaty *et al.* are silent regarding these indicated features.

On pages 4-5 of the Office Action, the Examiner asserts that "Robbins in view of Galaty teaches concept and capability for:" 1) defining a nonlinear objective function that includes control variables representing stored influence factors for all of the different types of appraisal approaches, 2) nonlinear programming of the nonlinear objective function to simultaneously optimize the nonlinear objective function for all of the different types of appraisal approaches by adjusting the control variables within the corresponding range of influence factor values and 3) that all of the different types of appraisal approaches are used together to optimize the nonlinear objective function. However, the Examiner has not

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indicated where either Robbins or Galaty *et al.* teach these indicated features. Because the Examiner has not indicated where all of the features of claims 1 and 12 are disclosed in the cited art, the rejection of claims 1 and 12 is improper. Applicant respectfully requests that the Examiner point out where either Robbins or Galaty *et al.* specifically teaches Applicant's claimed features or withdraw the rejection. In fact, there is no teaching of these indicated features in either Robbins or Galaty *et al.* As discussed above, Galaty *et al.* only teach separately calculating the property value, followed by a reconciliation process to produce a single estimate of the market value. Thus, for the reasons set forth above, allowance of claims 1 and 12 is respectfully requested.

Claims 2-11, which include all of the limitations of claim 1, are also patentable over the cited art for at least the same reasons as claim 1.

In view of the amendments and arguments set forth above, the above-identified application is in condition for allowance which action is respectfully requested.

Respectfully submitted,

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LEA/kpc

Attachment: Copy of Interim Examination Instructions

Dated: July 19, 2010

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The Director is hereby authorized to charge or credit Deposit Account No. 18-0350 for any additional fees, or any underpayment or credit for overpayment in connection herewith.

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office (571-273-8300) on the date shown below.

July 19, 2010

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# INTERIM EXAMINATION INSTRUCTIONS FOR EVALUATING SUBJECT MATTER ELIGIBILITY UNDER 35 U.S.C. §101



Andrew Hirshfeld, Acting DCPEP  
Caroline Dennison, Michael Cygan, Nicole Dretar, and  
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August 2009  
United States Patent and Trademark Office



# PROCESS EXAMPLE: CLAIM 5

## Claim Tied to a Particular Machine

Claim 5. A method of evaluating search results, comprising:

- sorting the results into groups based on a first characteristic;
- ranking the results based on a second characteristic; and
- comparing, using a microprocessor, the ranked results to a predetermined list of desired results to evaluate the success of the search.

Under the BRI, the microprocessor must be programmed in a particular manner to perform the claimed comparing step.

- Is there a particular machine? (M2)
    - YES - under the BRI, the step of comparing requires a particularly programmed microprocessor.
  - Does the machine impose a meaningful limit and is it more than insignificant extra-solution activity? (M3)
    - YES - the step of comparing is central to the method invented by applicant - it is not a mere field-of-use or insignificant extra-solution activity.
- The claim is **eligible** (M4).